million square feet of low-E windows. It does not include the residential retrofit market, the commercial sector, or potential cooling load savings in the sunbelt. The variety of new low-E products and the diversity of their potential applications make it difficult to predict their total energy savings potential. It is clear, however, that the estimates given above are conservative because they include only part of the potential applications. The amount of energy savings associated with the estimated sales of low-E windows between 1985 and 1992 are shown in Fig. 4.1. Cumulative savings for this time period could approach 0.1 quad.

4.1.6 Return on the DOE Investment

The U.S. Department of Energy invested about $2 million in the development of low-E windows. This investment leveraged private sector investments in new deposition systems and in the development of new window product lines that exceeded $100 million. By 1985 windows with low-E coatings were saving consumers $14 million per year on their energy bills. By 1995 annual heating savings should be over $120 million, and by the year 2,000, cumulative savings should exceed three billion dollars (American Council for an Energy-Efficient Economy and Energy Conservation Coalition, 1986).

There are a variety of other benefits from this DOE-sponsored research in addition to the savings on fuel bills. The fenestration industry benefits from the development of a new production technology, increased employment, and new value-added products that are competitive internationally. The nation benefits from decreased dependence on imported fuel and from an improved balance of payments (American Council for an Energy-Efficient Economy and Energy Conservation Coalition, 1986).